UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,126	01/21/2004	Yuji Kobayashi	CANO:116	4104

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EXAMINER
NGUYEN, CAM LINH T

ART UNIT	PAPER NUMBER
2161	

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/762,126	KOBAYASHI, YUJI
	Examiner	Art Unit	
	CamLinh Nguyen	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>21 January 2004</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-16</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-16</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/21/04</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. · This Office Action is response to communication filed on 1/21/2004.

2.   Claims 1 – 16 are currently pending.

Information Disclosure Statement

3.   ·The information disclosure statement (IDS) submitted on 1/21/2004 is in compliance

with the provisions of 37 CFR 1.97, 1.98, and MPEP §600. Accordingly, the information

disclosure statement has been placed in the application file and is being considered by the

examiner.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.   Claims 1- 8, 11, 13 - 15 are rejected under 35 U.S.C. 101 because the claimed invention

is directed to non-statutory subject matter.

Claims 1 and 15 are rejected as non-statutory for not having a tangible result. The word

"determines" does not necessarily require the register device to register the unknown word on a

computer. Functional descriptive matter Computer program without computer readable media

and computer can be considered abstract.

For suggestion how to overcome this rejection, applicant need to produce a tangible result based

on these devices such as registering or storing the registered word in a computer device, and

must specify what action will take place for the determining step if it's inhibited to register the

unknown word.

Claim 11 is rejected as non-statutory. This can be interpreted as being done as a method being

Performed by an electro-optical device and it can also be interpreted prior to claim 1 as being

directed towards a series of mental steps. All the steps of the claimed method can be carried out

within the human mind. Mental steps are not patent eligible subject matter for the reason that the

mental steps are insufficient to produce a useful, concrete, and tangible result, and pass the

practical application test set forth in State Street. To be patent-eligible, abstract steps must

produce either a physical transformation or a useful, concrete and tangible result.

Claim 13 – 14 are rejected as non- statutory. This can be interpreted as being software per se.

The units described admit of software in the absence of computer hardware for executing units of

executable programs stored on computer readable media.

6.   To expedite a complete examination of the instant application the claims rejected under

35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of

application amending these claims to place them within the four statutory categories of

invention.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 1 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morton et al (U.S. 2005/0216443 A1) in view of Yasujima et al (U.S. 4,944,022).

♦ As per claims 1, 9, 11 - 16,

Morton discloses an information searching apparatus/ method/computer readable medium/ program comprising:

- " An index information registering device that registers a word extracted from a document in association with the document as index information for document search" corresponds to the relevance interval calculation server device that registers the data into the search index 120 (Fig. 9, element 120, paragraph 0086 of Morton).

- " A document searching device that searches a document corresponding to information relating to a requested search by referring to the index information registered by said index information registering device" corresponds to the client device that searches a document corresponding to information relating to a requested search by referring to the index information registered by said index information registering device (Fig. 9 of Morton).

- "An unknown extracting device that extracts an word from the document being searched" corresponds to Data analysis and Extraction server 122 in Fig. 9, paragraphs 0066, 0091 – 0093 of Morton. Morton discloses that information is extracted using the optical character recognition (OCR) (paragraph 0093 of Morton). Applicant also uses the OCR

for extracting the unknown word. Therefore, the OCR in Morton corresponds to the

unknown extracting device in the instant claimed invention.

- " A document type determining device that determines a type of the document being

  searched" corresponds to the named entity identification module 107 (See paragraph

  0172, 0060 of Morton).

- " And a registration permitting/inhibiting determining device that determines whether

  said index information registering device is permitted or inhibited to register the word

  extracted by said word extracting device as the index information, according to the type

  of the document determined by said document type determining device" also corresponds

  to the relevance interval calculation server device that registers the data into the search

  index 120 (Fig. 9, element 120, paragraph 0086 of Morton). Also see paragraph 0058 –

  0060 of Morton.

Morton does not clearly disclose the extracting device extracts an unknown word. However,

it is a well-known technique in the art. Yasujima provided an example. Yasujima teaches that the

OCR recognizes the unknown word from the image data and corrects the unknown word using

the data dictionary (col. 1, lines 5 – 41 of Yasujima). Therefore, the OCR in Yasujima also is the

character correcting device.

It would have been obvious to one with ordinary skill in the art at the time the invention was

made to apply the teaching of Yasujima into the invention of Morton because the combination

would produce the user more accurate result by using the OCR to extract the unknown word and

using a data dictionary to correct the unknown word.

♦ As per claims 2 - 3, the combination of Morton and Yasujima disclose:

- "Said document type determining device determines whether the document being

searched is a character recognition processed document including character codes

obtained by a character recognition process, and said registration permitting/inhibiting

determining device is operable when the document being searched is the character

recognition processed document, to inhibit said index information registering device from

registering as the index information the unknown word extracted from the document

being searched by said unknown word extracting device" and "Said document type

determining device determines whether the document being searched is a character

recognition processed document including character codes obtained by a character

recognition process; the information searching apparatus further comprises a

permitting/inhibiting designating device operable when the document being searched is

the character recognition processed document, to designate whether said index

information registering device is permitted or inhibited to register as the index

information the unknown word extracted by said unknown word extracting device from

the document being searched; and said registration permitting/inhibiting designating

device is operable when the document being searched is the character recognition

processed document, to determine whether said index information registering device is

permitted or inhibited to register as the index information the unknown word extracted by

said unknown word extracting device, based on the designation by said

permitting/inhibiting designating device"

Since Yasujima discloses a dictionary to correct the unknown word from the image data (col. 1,

lines 5 – 41 of Yasujima), the document type determining device (named entity identification

module) can determine whether the document being searched is a character recognition

processed document including character codes obtained by a character recognition process, and

said registration permitting/inhibiting determining device is operable when the document being

searched is the character recognition processed document, to inhibit said index information

registering device from registering as the index information the unknown word extracted from

the document being searched by said unknown word extracting device.

♦ As per claim 4, the combination of Morton and Yasujima disclose:

Morton discloses this limitation by registering the words extracted from the document

into the search index.

♦ As per claim 5, the combination of Morton and Yasujima disclose:

-   " A character correcting device" See col. 1, lines 5 – 41 of Yasujima.

♦ As per claims 6 - 7, 10, the combination of Morton and Yasujima disclose:

-   " A character recognition processing device" corresponds to the OCR device in Morton

    patent.

-   " A word dictionary" corresponds to the dictionary in Yasujima (See col. 1, lines 5 – 41

    of Yasujima).

♦ As per claim 8, the combination of Morton and Yasujima disclose:

-   " File name extension" See paragraph 0060 of Morton.

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

- Tada et al (U.S. 7,010,519 B2) discloses a method and system for expanding document retrieval information.

- Kiyono et al (U.S. 2003/0063326 A1) discloses a document registration system, method thereof, program thereof and storage medium thereof.

- Yukata et al., "Highly accurate retrieval of Japanese document images through a combination of morphological analysis and OCR", 2002, Proceedings of SPIE Vol. 4670, page 57 - 67.

- Jeffrey Black et al., "Automated Document Analysis System", 2002,Proceedings of SPIE Vol. 4708, page 90 - 98.

- James Peterson, "Computer Programs for Detecting and Correcting Spelling Errors", December 1980, communications of the ACM, Volume 23, number 12, pages 676 - 687.

10.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to CamLinh Nguyen whose telephone number is (571) 272 - 4024. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272 - 4146. The fax phone number for the organization where this application or proceeding is assigned is 571 – 273 - 8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen, Cam-Linh

Art Unit 2161

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